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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/450,716	THOUMY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	KHAI TRAN	2637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the preliminary amendment filed 4/09/2004.
2. ☒ The allowed claim(s) is/are 1-21,24,26-98 and 105-110.
3. ☒ The drawings filed on 10/14/2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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## ***REASONS FOR ALLOWANCE***

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 4/9/2004 has been entered. Claims 22, 23, 25, and 99-104 have been cancelled. Claims 1-21, 24, 26-98, 105-110 are pending in this Office action.

### ***Allowable Subject Matter***

2. Claims 1-21, 24, 26-98, 105-110 are allowed.
3. The following is an examiner's statement of reasons for allowance: none of the prior art of the record discloses or suggests a method of transmitting data using multicarrier - type a modulation, comprising the steps of: allocating transmission data to the sub-carrier in an order, wherein the order is based on an importance of the transmission data and the first signal, and inserting a second signal in transmission data, wherein the second signal represents the order in which the transmission data are allocated to the sub-carriers based on the importance of the transmission data an the first signal, as recited in claims 1, 4, 27. None of the prior art of the record discloses or suggests a method of receiving data using multicarrier-type modulation, comprising the

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steps of: extracting received data of a signal representing an order in which the transmission data are arranged by a transmission device on the sub-carrier; and forming the received data according to the signal representing the order in which the transmission data are arranged by the transmission, as recited in claims 2, 26, 30.

Furthermore, none of the prior art of the record discloses or suggests a method of transmitting data from a local device to a remote device via transmission channel, comprising: inserting a "Least Significant Data" flag and applying an algorithm that generates an OFDM symbol by using an inverse fast Fourier transform (IFFT) matrix modified so as to reduce a peak value of the signal, in case where the data is not highly important, as recited in claim 24.

None of the prior art of the record discloses or suggests a device for transmitting data to a remote device via transmission channel, comprising: an inserting unit for inserting into data an item of information corresponding to a chosen modulator, wherein a modulator is chosen according to an importance of a data received from the data source, and wherein the importance of data received from the data source also affects operation of the plurality of multiplexers, as recited in claim 27.

None of the prior art of the record discloses or suggests a method of managing information transmissions by radio between a base station and at least one peripheral stations, comprising: allocating a number of carriers and a modulation to at least one communication channel allocated to a transmission of information between the base station and the at least one peripheral station, in accordance with the acceptable error

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rate for a transmission of information between the base station and the at least one peripheral station, as recited in claims 41, 54, 74, and 91.

None of the prior art of the record discloses or suggests a method of receiving information coming from a radio communication channel, comprising: selecting the carrier and modulation allocated to the information, in accordance with acceptable error rate for an information transmission, as recited in claims 64, 84.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHAI TRAN  
Primary Examiner  
Art Unit 2637

**KT**  
**March 16, 2005**